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JUN 26 1998
DOE-0947-98

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF5J
77 W. Jackson Boulevard
Chicago, IL 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 E. 5th Street
Dayton, OH 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF 1) THE INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR FIRST QUARTER 1998 (JUNE 1998) AND 2) RESPONSE TO U.S. ENVIRONMENTAL PROTECTION AGENCY AND OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR FOURTH QUARTER 1997 (MARCH 1998)

This letter transmits the subject documents. The report meets the quarterly reporting obligation defined in the Integrated Environmental Monitoring Plan (IEMP) for the Fernald Environmental Management Project (FEMP). In addition, comments received on the previous IEMP Status Report (Fourth Quarter 1997) are addressed in the attached comment response document. The IEMP Status Report for First Quarter 1998 has incorporated the actions described in the comment response document. It should also be noted that 1997 data that were not presented in the fourth quarter report were incorporated into the 1997 Integrated Site Environmental Report submitted on June 1, 1998.

Beginning with the IEMP Status Report for the First Quarter 1998, surface water, treated effluent, and radon data previously presented in the Federal Facility Agreement/Federal Facility Compliance Act (FFA/FFCA), will be submitted through the IEMP status reports. The one exception to this reporting change is the data from the South Field Leachate System, which due to the short duration of the project, will continue to be reported through the FFCA until the system is decommissioned later in 1998.

Information formerly reported through the FFA/FFCA will be provided as either text or tables within the IEMP status reports or within the accompanying data disks. For example, continuous radon monitoring data are provided in the same format as previous FFA/FFCA submittals, but are contained in the data disks accompanying the IEMP status report. In addition, a summary table of environmental radon data and a graphical display of silo head space data are provided in the body of the IEMP status report.

Raw data used in developing this report are submitted in electronic format. The analytical data associated with this report are provided on six disks: one disk contains groundwater data; one disk contains surface water data; one disk contains air data, exclusive of the continuous radon data, and the remaining three disks contain the continuous radon data. Each disk contains a WordPerfect file that identifies the files on each disk, and how the data in the tables of the IEMP status report can be generated.

The DOE recommends a meeting during the last week of July to discuss the biannual revision of the IEMP which will be submitted in the fall of 1998. In addition, DOE recommends the transmittal of future data via CD-ROM, rather than disks, to simplify and reduce the cost associated with data transmittal. Should you have any questions regarding this submittal, please contact Kathleen Nickel at (513) 648-3166.

Sincerely,

for Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosure: As Stated

cc w/enc:

F. Barker, Tetra Tech (w/disks)
R. Beaumier, TPSS/DERR, OEPA-Columbus
F. Bell, ATSDR
D. Carr, FDF/9
T. Hagen, FDF/65-2
N. Hallein, EM-41/CLOV (w/disks)
J. Harmon, FDF/90
G. Jablonowski, USEPA-V, 5HRE-8J
M. Murphy, USEPA-V, AE-17J
J. Saric, USEPA-V, SRF-5J (w/disks)
T. Schneider, OEPA-Dayton (total of 3 copies of encs.) (w/disks)
M. Schupe, HSI GeoTrans (w/disks)
R. Vandergrift, ODOH
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cc w/o enc:

R. Heck, FDF/2
S. Hinnefeld, FDF/2
EDC, FDF/52-7

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RESPONSES TO OEPA COMMENTS ON THE DRAFT INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR FOURTH QUARTER 1997

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

JUNE 1998

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

Attachment [illegible]

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RESPONSES TO OEPA COMMENTS ON THE DRAFT INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR FOURTH QUARTER 1997

General Comments

Commenting Organization: OEPA Commentor: OFFO
Section#: 2.0 Pg.#: Line#: Code: C
Original General Comment# 1
Comment: Will leachate volumes from the OSDF be reported in this section of the IEMP?
Response: Leachate volumes and concentrations from the OSDF will be reported in the Groundwater Monitoring Update section of future IEMP quarterly status reports. The Leachate Collection System for Cell 1 was completed in December 1997 and sampling was initiated during the first quarter of 1998. Results from the Leachate Collection System will be on the same reporting schedule as the groundwater analytical results. Therefore, the first results from the Leachate Collection System will be reported in the September IEMP quarterly status report.
Action: Leachate volumes and concentrations will be reported in future IEMP quarterly status reports (Groundwater Monitoring Update section) beginning with the September report.

Comments

Commenting Organization: OEPA Commentor: DSW
Section#: 2.2 Pg.#: 2-1 Line#: 30-32 Code: C
Original Comment# 2
Comment: The NPDES storm drainage in this area is referred to as STRM 4004. I found this confusing as the original designation of this sampling point was STRM002 in the Stormwater Permit Application and accompanying drawing (00X-5500-G-01781). In the current NPDES permit the sampling point is II000004004 abbreviated as NPDES 4004. The old STRM004 is actually NPDES 4006. I wouldn't expect the IEMP to change the sampling point designation, but wish to make them aware that there may be some confusion as to the location of their STRM 4004 because of this history.
Response: Figure 2-2 of the Integrated Environmental Monitoring Status Report for Fourth Quarter 1997 shows the monitoring locations STRM 4006 and STRM 4004. Coordinates for these locations and for any pre-existing names for these locations are retained in the FEMP Sitewide Environmental Database. Therefore, data for each location will be evaluated regardless of differing monitoring location names. For future IEMP reports (both annual and quarterly), data from the location in question will continue to be reported under STRM 4004. However, every attempt will be made to avoid duplicating sample location numbers or using old numbers for new locations.
Action: No action required.

Commenting Organization: OEPA Commentor: DSW
Section#: 2.2 Pg.#: 2-2 Line#: 1-2 Code:
Original Comment# 3
Comment: The statement on page 2-2, lines 1-2 should be qualified as in Table 2-4, i.e., the monthly average total uranium concentration was not exceeded when allowable bypasses are eliminated. I like the reporting in the actual values in Figure 2-4. This aids in interpretation

of our sampling results. I also like receiving the raw data. Although I had some initial misgivings about the IEMP and its reporting mechanisms, I'm beginning to be more appreciative of it.

I am concerned about the phosphorus result of well 2636 at the Paddys Run Road Site. We have never sampled the ground water influence of Paddys Run at SR 128 for phosphorus. I realize that this is not directly attributable to Fernald. However, those high levels seem to warrant at least one sample in the stream to see if the phosphorus is making its way to Paddys Run.

Response: There appear to be two comments in the original comment. For the first comment, DOE agrees that the monthly average total uranium concentration was not exceeded when allowable bypass days were eliminated.

As stated in the second comment concerning sampling for phosphorous contribution from the Paddys Run Road Site plume, the phosphorous contamination is not attributable to the FEMP. Phosphorous is not a FEMP constituent of concern nor does it have established final remediation levels in groundwater or surface water and is sampled solely to determine potential impacts to Paddys Run Road Site Plume from the South Plume Extraction System operations. Sampling of this well indicates no significant trend with respect to phosphorus concentrations which suggest that there has been no influence from the South Plume Extraction System.

Action: Future IEMP quarterly status reports will identify, as applicable, that the 20 μg/L limit was met when allowable bypass days were eliminated.

Commenting Organization: OEPA Commentor: OFFO
Section#: 2.2 Pg.#: Figure 2-4 Line#: Code:
Original Comment# 4

Comment: The sidebar says that "eight of 10 allowable "significant precipitations" bypass days were utilized to maintain the 20 μg/L limit." But referring to the footnotes and totaling the bypasses yields 11 days. Resolve the discrepancy.

Response: The total number of bypass days for 1997 was 11; however, as noted in footnote "d", three of these bypasses were maintenance related. The Record of Decision for Remedial Actions at Operable Unit 5 provides allowances for both "significant precipitation" bypasses and "treatment plant maintenance" bypasses. Significant precipitation bypass days are limited to 10 per year. However, the number of allowed treatment plant maintenance bypass days are not specifically called out. All three of these treatment plant maintenance bypass days were pre-approved with the regulatory agencies.

Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 3.2 Pg.#: 3-2 Line#: Code:
Original Comment# 5

Comment: Previous comments (3rd quarter 1997) requested that a summary of the radon data reported in Enclosure C of the FFCA be included in the IEMP quarterly status reports. Again, this data has been omitted. Coordinate with the OEPA and USEPA as to what portions of Enclosure C should be included.

Response: As stated in previous comment responses (Integrated Environmental Monitoring Status Report for Third Quarter 1997), radon data will be transitioned from the FFCA into the Integrated Environmental Monitoring Status Report for First Quarter 1998 under the IEMP, to be submitted in June 1998. Therefore, beginning January 1, 1998, all continuous radon monitoring will be submitted through the IEMP reports (both annual and quarterly). The

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format which was previously reported through the FFCA for continuous radon data will be provided on the data disk accompanying the IEMP quarterly status reports. In addition to the information provided on the data disks, a summary table of environmental radon data and a graphical display of silo head space data will be provided in the IEMP reports. All continuous radon data through December 1997 have been included in Enclosure C of the FFCA.

Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 3.2 Pg.#: 3-1 Line#: 30-33 Code:
Original Comment# 6

Comment: The elevated total uranium and total particulate concentrations in October were also noted in OEPA monitoring results, as well as, AMS8-A. However, it was not to the same magnitude. As agreed in the implementation of the IEMP, how was the specific project notified of this excursion? OEPA should also be notified to ensure that specific projects are aware of an excursion caused by their activities. This excursion is evidence of poor fugitive dust control practices.

Response: The DOE identified the temporary increase in the data specifically associated with AMS-3 when the data was received from the laboratory during October 1997. The data were tracked through the fourth quarter of 1997 to determine if a positive trend was developing or if a sustained increase in airborne total uranium particulate concentrations could be identified. While two samples collected at AMS-3 during late September and early October 1997 did show a temporary increase, they did not indicate a trend in the data. This determination was supported by subsequent data collected in October 1997 at AMS-3. Therefore, no notification was made to the projects in this instance.

DOE will continue to utilize the air particulate data evaluation criteria provided in Section 6.6.1 of the IEMP to assess the data and to trigger corrective actions as necessary. If a significant trend is identified which requires project notification and corrective actions, then DOE will notify OEPA as requested and as discussed in Chapter 1 of the IEMP.

Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 3.2 Pg.#: 3-2 Line#: 28-41 Code:
Original Comment# 7

Comment: Coordination and communication between the specific projects and the regulators should have been implemented to ensure continuation of monitoring activities in the waste pit area. Although these monitors are not part of the IEMP monitoring strategy they are and will be an integral part of monitoring during the OU1 remediation.

Response: A significant amount of air monitoring will be conducted in support of the Operable Unit 1 remediation to meet all regulatory requirements and to ensure protection of the workers, the public, and the environment. A summary of the various air monitoring components supporting Operable Unit 1 is provided below.

- Data from the Operable Unit 1 occupational monitoring program including personal breathing zone monitoring, air particulate monitoring at the work area and at the posting boundaries for air borne radiation areas, routine contamination surveys, continuous radon monitoring, and direct radiation monitoring will be used to support project-specific decisions related to worker personal protective equipment, stay times, and contamination control.

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- As required by the FEMP's best available technology determination for fugitive dust control, visual monitoring will be conducted and dust suppression will be utilized to ensure fugitive emissions are minimized.

- The Operable Unit 1 waste drying unit stack will be continuously monitored with process control limits established for specific stack emissions to ensure compliance with regulatory thresholds.

- Environmental air monitoring for radiological air particulates, radon, and direct radiation will be conducted under the IEMP to support compliance with various regulatory drivers and DOE orders including NESHAP Subpart H requirements and DOE Orders 5400.1 and 5400.5. The data also provides the basis for evaluating the effectiveness of sitewide emission controls.

The data collected under the Operable Unit 1 project-specific air monitoring programs will be evaluated together with the data collected under the IEMP to assess the effectiveness of Operable Unit 1 emission controls. This information will be made available to the EPA and OEPA on a routine basis.

Action: Provide air monitoring information related to Operable Unit 1 remediation activities, as described above, to EPA and OEPA on a routine schedule.

Commenting Organization: OEPA Commentor: OFFO
Section#: 3.2 Pg.#: 3-2 Line#: 28-41 Code:
Original Comment# 8
Comment: This section addresses the removal from service of four air monitors in the area of the Waste Pits. It defers any additional air monitors in this area to Operable Unit 1. The draft Waste Pits Remedial Action Project Remedial Design Package does not contain any specific commitment to perform environmental monitoring. Ohio EPA comments on that package will request development of an environmental monitoring plan to include restarting these four monitors.
Response: See Comment Response #7.
Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 3.2 Pg.#: 3-2 Line#: Code:
Original Comment# 9
Comment: Previous comments (3rd quarter 1997) requested that a summary of the radon data reported in Enclosure C of the FFCA be included in the IEMP quarterly status reports. Again, this data has been omitted. Coordinate with the OEPA and USEPA as to what portions of Enclosure C should be included.
Response: See Comment Response #5.
Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 4.0 Pg.#: Line#: Code:
Original Comment# 10
Comment: Impacts resulting from the installation of the south field extraction and injection wells and associated piping were not properly accounted for. The work in this area resulted in significant impacts to grasslands, riparian zones, and stream channels. The impacts to these areas started in 1997 and needed to be accounted for in the IEMP annual report.
Response: Due to snow cover, these impacted areas were not able to be accurately "ground-truthed"

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in 1997. It should be noted that in April 1998, a tentative settlement was reached among the Natural Resource Trustees that includes the dedication of the FEMP property, excluding the area occupied by the on-site disposal facility, the supplemental environmental projects, and the 23 acres being evaluated for economic development, to natural resource restoration. Given the tentative settlement, the need to check and report impacted habitat in the IEMP has been eliminated.

Action: No action required.

Commenting Organization: OEPA Commentor: OFFO
Section#: 4.2 Pg.#: Line#: Code:
Original Comment# 11

Comment: The "wet areas" located within A1P2 near the former trap range should be evaluated to determine their potential status as wetland. A recent visit by Ohio EPA suggests the area may qualify as a wetland.

Response: Agreed.

Action: The areas where surface water tends to accumulate on the former trap range will be evaluated to determine wetland status and will be identified in the IEMP annual reports and through letters sent to the Fernald Natural Resource Trustees.